

POLYAKOV, B. I.

7

ACCESSION NR: AT4042700

S/0000/63/000/000/0339/0343

AUTHOR: Lebedinskiy, A. V.; Arlashchenko, N. I.; Busygin, V. Ye.; Vartbaronov, R. A.; Veselov, A. S.; Volokhova, N. A.; Grigor'yev, Yu. G.; Yemel'yanov, M. D.; Kalyayeva, T. V.; Krylov, Yu. V.; Polyakov, B. I.; Farber, Yu. V.

TITLE: Effects of Coriolis accelerations on the human organism

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963.
Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 339-343

TOPIC TAGS: vestibular analyzer, cosmonaut selection, cosmonaut training, semi-circular canal, acceleration, rotation, nystagmus, optical analyzer, Coriolis acceleration

ABSTRACT: Studies of the effect of prolonged Coriolis accelerations on the human organism must be made as a preliminary step toward the creation of artificial gravity in spaceships. Studies were performed in a slowly rotating MBK-1 chamber (a cylindrically shaped room 2.1 m in diameter and 2.3 m high, equipped with two armchairs). In the first series of experiments, 13 healthy persons were subjected

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to prolonged rotation of 1 to 5 hours at an angular velocity of $5.3^\circ/\text{sec}$. In the second series of experiments, 4 subjects were rotated for 24 hours at angular velocities of 5.3, 10.6, and $21.2^\circ/\text{sec}$. Coriolis accelerations were created periodically by tilting the body and head in a plane perpendicular to the plane of rotation of the chamber at the rate of 1 movement/sec. Prolonged stay of subjects with normal vestibular sensitivity under conditions of rotation at 5.3, 10.6, and $21.2^\circ/\text{sec}$ resulted in functional changes in the condition of the central nervous system and the cardiovascular system, and in disruption of the body temperature control and the balancing function. The degree of vegetative disorders was found to be directly proportional to the speed of rotation and the degree of vestibular sensitivity of the subjects. During cumulative action of Coriolis accelerations, the majority of the subjects developed an adaptation which was noted from 1 to 5 hours after beginning of the rotation. On the basis of the results obtained, the method of prolonged slow rotation is recommended for training purposes.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: 18

NO REF SOV: 000

OTHER: 000

Card 2/2

VALUGIN, K.N., inzh. [deceased]; POLYAKOV, B.N.

Manipulators and turners for the 1300 blooming mill
with automatic control. (bor. st. NIITIAZHMASHa
Uralsmashzavoda no.6:5-41 '65.

(MIRA 18:11)

POLYAKOV, B.N.

Improving the feed mechanism of a welding machine. Mashinostroitel'
no.11:10 N '64 (MIRA 18:2)

POLYAKOV, B.N.

Machine for sorting parquetry staves. Rats. i izobr.predl.y stroi.
no.123:18-21 '55. (Parquetry) (MIRA 9:7)

LICKUMOVICH, I.M.; POLYAKOV, B.S.

Improving the quality of bricks with dehydrated clay. Stroitel'nykh materialy. 1965. No. 1:9-10. Ja '65. (MIRA 18:6)

1. General'nyy direktor Rostovskogo proizvodstvennogo ob'yedineniya stroitel'nykh materialov (for Lickumovich). 2. Glavnyy inzhener Rostovskogo proizvodstvennogo ob'yedineniya stroitel'nykh materialov (for Polyakov).

POLYAKOV, B. V.

Polyakov, B. V.

"Planning the Limits of Open-Pit Mines under Complex Mining-Geological Conditions." Tomsk Order of Labor Red Banner Polytechnic Institute imeni S. M. Kirov. Chair of the Working of Ore Deposits. Tomsk, 1954 (Dissertation for the degree of Candidate in Technical Science)

SC: Knizhnaya letopis' No. 27, 2 July 1955

ACC NR: AP7001461

(A)

SOURCE CODE: UR/0413/66/000/021/0212/0212

INVENTOR: Polyakov, B. V.

ORG: none

TITLE: An assembly for producing mechanical air foam used in extinguishing a fire.
Class 61, No. 188309

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 212

TOPIC TAGS: fire fighting equipment, atomization

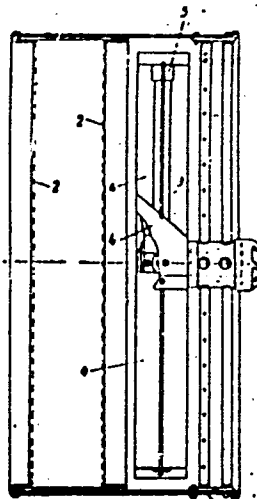
ABSTRACT: This Author Certificate presents an assembly for producing mechanical air foam used in extinguishing a fire. The assembly includes an atomizer rotated by the energy of the flowing foam-producing solution. It also contains a casing carrying within it grids and an atomizer with blades (see Fig. 1). In an alternate design, the atomizer has the form of a Segner wheel with nozzles at the end of its perforated pipes. The atomizer may also be fixed on a ring which is connected to the source of the foam-producing solution. Other rings pressed into the first one act as supporting bearings.

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UDC: 614.843

ACC NR: AP7001461

Fig. 1. 1 - casing; 2 - grids; 3 - atomizer;
4 - blades; 5 - nozzles



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 14Dec64

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POLYAKOV, D.; KRYSHCHENKO, V.

Along the path of technical progress. Nauka i zhyttia 12
no.9:18-19 S '62. (MIRA 16:1)

1. Predsedatel' Odesskogo sove'ta narodnogo khozyaystva (for
Polyakov). 2. Obshchestvennyy korrespondent zhurnala
"Nauka i zhittya" (for Kryshchenko).
(Technological innovations)

POLYAKOV, D.A.

Argon-shielded arc welding of titanium parts. Titan i ego splavy
no.3:147-151 '60. (MIRA 13:7)
(Titanium--Welding) (Protective atmospheres)

POLYALLOY, D. A.

Andriyevskiy, S. G. Institute metallurgii	509/5508
Titanium alloy, V.P. 3. Metallurgical titanium (titanium and its alloys, 50. 3. Metallurgical titanium) Moscow, 1960, 101 p. Extra slip inserted, 2,700 copies printed.	
Sponsored Agency: Metallurgy and Steel, Institute metallurgii	
Responsible: N.Y. Agrest, Corresponding Member, Academy of Sciences USSR, Ed. of Publishing House: M.I. Polyakovskiy, Tech. Ed.: Ye. V. Mamont.	
PURPOSE: This collection of articles is intended for scientific research workers and metallurgical engineers.	
CONTENTS: The articles summarize results of experimental studies of titanium-base alloys. The microstructure and mechanical properties of titanium-base alloys containing aluminum, chromium or other metals are analyzed along with the effect of oxygen, hydrogen and heat treatment on alloy structure and properties. The technology of titanium alloys to embrittlement as a result of strain aging is reported, and the hardening of titanium, carried out to increase the strength of cast and wrought titanium under conditions of electric heating, is described. The properties of certain titanium-base alloys capable of withstanding temperatures over 1200°C are also described. The problems of titanium-powder metallurgy and weldability of certain titanium-base alloys, so particularly are mentioned. Most of the articles have bibliographic references, the majority of which are Soviet.	
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TRET'YAKOV, P. Ye., and SHCHERBAKOV, N. M. (Consultants of Technical Sciences),
KG GORYACHEV, A. P. AND POLYAKOV, D. A. (Engineers)

"Welding of Titanium,"

paper presented at All-Union Scientific-Technical conference on Welding in
Shielding Gases, Leningrad, Dec 1957.

(Svarochnoye Proizvodstvo, 1958, No. 4, pp 46-47 - author Tyuk'kov, M. D.)

NEDOL'SKIY, L.N., doktor tekhn. nauk, prof., GZHINOV, I.I., k. ind. nauk.
nauk, dozent; MILAYEV, D.D., starshiy inzhener.

Method for comparative evaluation of spring-friction shock absorbers
for railroad rolling stock. Izv. vuz. nauch. zap.; mashinost. no.8:
122-133 1964. (MIRA 17:11)

1. Bryanskiy institut transportnogo mashinostroyeniya.

POLYAKOV, D G

TITLE: Books (Knigi)

121-2-19/20

PERIODICAL: "Stanki i Instrument" (Machine Tools and Tools), 1957,
No.2, p. 44 (U.S.S.R.)

ABSTRACT: Gurevich, B.G., "The strengthening of threads by surface rolling" (Uprocheniye rez'by obkatkoy), AN SSSR, Moscow, 1956, 14 pages.

Ivanov, G.P. et al., "The effects of the electric spark hardened layer on the wear resistance and the fatigue strength of components" (Vliyaniye sloya elektroiskrovoy obrabotki na iznosostoykost' i ustalostnuyu prochnost' detaley). "The improvement of the cavitation resistance of components by electric spark hardening" (Povysheniye kavitatsionnoy stoykosti detaley elektroiskrovym uprochneniyem). "The thermal stability of the electric spark hardened layer in tempering" (Teploustoychivost' sloya elektroiskrovogo uprochneniya pri otpuske), AN SSSR, Moscow, 1956, 24 pages.

Davidenkov, N.N. (Editor). "Problems of design, manufacture and service of springs" (Voprosy proyektirovaniya, izgotovleniya i sluzhby pruzhin). Collection of articles. Mashgiz, Moscow-Leningrad, 1956, 267 pages.

1/4 Pavlov, Z.P. et al. "Machine for the testing of cylindrical

Books (Cont.)

121-2-19/20

rollers for fretting fatigue" (Mashina dlya ispytaniya tsil-indricheskikh rolikov na kontaktnuyu ustalost'). "A recording instrument for the tracing of compression, tension and relaxation diagrams" (Registriruyushchiy pribor dlya zapisi krivikh szhatiya, rastyazheniya i relaksatsii), AN SSSR, Moscow, 1956, 15 pages.

Polyakov, D.G. and Meyerovich, I.M. "Machines for strength tests of gear couplings and universally hinged shafts" (Mashiny dlya isputaniya na prochnost' zubchatykh muft i universal'nykh shpindeley), AN SSSR, Moscow, 1956, 13 pages.

Sergeyev, N.A. "Improvement of the productivity of labour in fitting and assembly work" (Povysheniye proizvoditel'nosti truda pri slesarnykh i sborochnykh rabotakh), Mashgiz, Moscow-Leningrad, 1956, 288 pages.

Proshin, G.A. "The electric spark treatment of machine components in repair work" (Elektroiskrovaya obrabotka detaley mashin pri remonte), Mashgiz, Kiev, Moscow, 1956, 111 pages.

Anfimov, M.I. "Designs of reducing gears" (Konstruktsii reduktorov). Album. Mashgiz, Moscow-Sverdlovsk, 1956, 220 pages.

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Books. (Cont.)

121-2-19/20

Gorbunov, E.K. and Kiselev, M.A. "Computation of the numerical strength of automatic screw machine setters (Raschet chislennosti naladchikov tokarnykh avtomatov), AN SSSR, Moscow, 1956, 13 pages.

"Fixtures for grinding work" (Prisposobleniya dlya shlifoval'nykh rabot). Collection of articles. AN SSSR, Moscow, 1956, 28 pages.

Raykher, S.A., "Safety engineering in heat treatment shops" (Tekhnika bezopasnosti v termicheskikh tsekhakh), Mashgiz, Moscow, 1956, 144 pages.

AVAILABLE:

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BEELYAYEV, V.N., dots., kand. tekhn.nauk; BOGATYREV, I.S., kand. tekhn. nauk; BULANZHE, A.V., dots.; VYBORNOV, P.V., st. prepod.; GADOLIN, V.L., dots., kand. tekhn. nauk; GOFMAN, E.I., dots.; DROZDOV, N.A., dots., kand. tekhn.nauk; ZAYTSEVA, L.I., inzh.; IVANOV, V.N., dots., kand. tekhn. nauk; KOROVIN, B.I., dots., kand. tekhn. nauk; LUKIN, V.I., dots., kand. tekhn.nauk; MORIN, I.S., dots., kand. tekhn. nauk; OGRIKINCHUK, I.A., inzh.; PALOCHKINA, N.V., inzh.; POLYAKOV, D.G., dots.; PARGIN, D.P., kand. tekhn.nauk[deceased]; RASPOPOV, A.G., st. prepod.; RESHETOV, D.N., prof., doktor tekhn. nauk; KASPEROVICH, N.S., inzh., red.; TIKHANOV, A.Ya., tekhn. red.

[Machine parts; atlas of designs] Detali mashin; atlas konstruktssii. Izd.2., perer. i dop. Moskva, Mashgiz, 1963.363 p.
(MIRA 16:12)

1. Kollektiv kafedry "Detali mashin" Moskovskogo vysshego tekhnicheskogo uchilishcha im. Baumana (for all except Kasperovich, Tikhanov).

(Machinery--Design and construction)

BELYAYEV, V.N., dots., kand. tekhn. nauk; BOGATYREV, I.S., dots.,
kand. tekhn. nauk; BULANZHE, A.V., dots.; VYBORNOV, P.V.,
st. prepod.; GADOLIN, V.L., dots., kand. tekhn. nauk;
GOFMAN, E.I., st. prepod.; DROZDOV, N.A., dots., kand.
tekhn. nauk; ZAYTSEVA, L.I., inzh.; IVANOV, V.N., dots.,
kand. tekhn. nauk; KOROVIN, B.I., dots., kand. tekhn. nauk;
LUKIN, V.I., dots., kand. tekhn. nauk; MORIN, I.S., dots.,
kand. tekhn. nauk; OGRINCHUK, I.A., inzh.; PALOCHKINA, N.V.,
inzh.; POLYAKOV, D.G., dots.; PARGIN, D.P., kand. tekhn. nauk;
RASPOPOV, A.G., st. prepod.; RESHETOV, D.N., prof., doktor
tekhn. nauk; STOLBIN, G.B., dots., kand. tekhn. nauk, retsenzent;
KASPEROVICH, N.S., inzh., red.; SMIRNOVA, G.V., tekhn. red.;
UVAROVA, A.F., tekhn. red.

[Machine parts; atlas of designs] Detali mashin; atlas kon-
struktsii. Moskva, Mashgiz, 1962. 346 p. (MIRA 15:3)

1. Kafedra "Detali mashin" Moskovskogo vysshego tekhnicheskogo
uchilishcha im. Baumana (for all except Stolbin, Kasperovich,
Smirnova, Uvarova).

(Machinery--Design)

POLYAKOV, Dmitriy Ivanovich; BEREZNYUK, V.A., otv.red.; LESNAYA, A.A.,
red.

[Development of machinery and instrument manufacture in the
Ukraine during the seven-year plan] Razvitie mashinostroeniia
i priborostroeniia na Ukraine v semiletke. Kiev, 1961. 37 p.
(Obshchestvo po rasprostraneniui politicheskikh i nauchnykh
znaniu Ukrainskoi SSR. Ser.7, no.1) (MIRA 14:6)
(Ukraine—Machinery industry)
(Ukraine—Instrument industry)

POLYAKOV, D.I.

Mechanization and automation of production processes in the
national economy of the Ukrainian S.S.S.R. Mashinostroenie
no. 2:3-5 Mr-Apr '64. (MIRA 17:5)

POLYAKOV, D.I.

Objectives of the Ukrainian machinery industry in 1964. Mashino-
stroenie no.1 3-6 Ja-F '64. (MIRA 17:7)

POLYAKOV, D. I.

"Worm Holes with Inserted Teeth," Stanki
i Instrument, 10, No. 4, 1939, Engineer,
Novokramatorsk Plant imeni Stalin

Report U-1505, 4 Oct 1951.

POLYAKOV, D.K.

F

/ 5166. BURNING OF HEAT IN FURNACES OF KOLDANOV TYPE. Polyakov, I.K.
(Tekst. Prot. (Text. Inc.). Mar. 1951, 13).

POLYAKOV, D.K.

Director, Far-Eastern Scientific Research Veterinary Institute and author of
"Antitreticular Cytotoxic Serum (ACS) in Veterinary Practice".
SO: Veterinariya; Vol. 22; No.11,12; Nov/Dec 1945; 28-30; Moscow
Trans. # 135 by L.Julich

POI: AKOV, D.K., Cand. of Vet. Sci.

"Propaganda of knowledge and implantation of the achievements
of science into productions - an urgent task of veterinary
experts."

SO: Veterinariia 27(9), 1950, p. 4

POLYAKOV, D.K.

Testing the Specificity of the Allergic Preparation "Anemia-VIEV" developed by
G.M. Bosh'yan. D.K. Polyakov.

SO: Vet. No. 9 Moscow 1950 pp 19-20.

- [illegible]

POBYAKOV, D. K.,

Veterinary Medicine

All-Union conference of workers in charge of veterinary medicine research organizations and of higher schools of learning. Veterinariia 29 no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1952, ~~2~~ Unclassified.

POLYAKOV, D.K.

MARKOV, A.A.; TSARUN, A.A.; POLIAKOV, D.K., Cand of Vet. Sciences, BOLGOV, IA. S.
Voronezh NIVOS

"On the significance of grassland system of agriculture in the
fight against hemosporidia of agricultural animals."

SO: Vet. 29 (3) 1952, p. 14

POLYAKOV, D.K., kand.veter. nauk; AKHUNOV, Kh.A.; MAKHMUDOV, I.A.

Control of ixodid ticks as the basis of the prophylaxis of
hemosporidiosis. Veterinariia 41 no.4:101-102 Ap '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii (for Polyakov). 2. Direktor Respublikanskoy veterinarnoy
laboratorii Uzbekskoy SSR (for Makhmudov).

POLYANOV, D.K.; LONCHIKOV, A.I.; KUCHENOV, D.S.

Effect of the association of organolithium compounds on their
ultraviolet spectra. Zhurnal Khim. Fiz. 7 no.1:1130 Ja '65.

(MIRA 18:5)

POLYAKOV, D.K.

Quantitative determination of small concentrations of water
by means of ethyllithium. Vysokom. soed. 7 no.4:606-608
Ap '65. (MIRA 18:6)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

AKULOVA, M.F.; PANKOVA, G.Ye. mladshiy nauchnyy sotrudnik; TSUVERKALOV, D.A.,
prof.; LEONT'YEV, A.I.; POLYAKOV, D.K., kand.veter. nauk

Laboratory practice. Vete inariia 40 no.5:58-71 My '63. (MIRA 17:1)

1. Rostovskiy --na--Donu gosudarstvennyy nauchno-issledovatel'skiy
protivochumnyy institut (for Akulova). 2. Vsesoyuznyy ~~nauchno~~-issle-
dovatel'skiy institut veterinarnoy virusologii i mikrobiologii (for
Pankova, TSuverkalov). 3. Vsesoyuznyy nauchno-issledovatel'skiy insti-
tut veterinarnoy sanitarii (for Polyakov).

POLYAKOV, D.K.; IVASHKOV, I.S.; ANDREYEV, K.P.; VORONIN, M.V.; POTAPOV, D.I.

Effectiveness of chlorophos and other preparations in hypodermosis in cattle. Veterinariia 37 no.4: 71-74 Ap'60.
(MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy sanitarii.
(CHLOROPHOS) (WABELE FLIES)

POLYAKOV, D.K.; SPIRIN, Yu.L.; GANTMAKHER, A.R.; MEDVEDEV, S.S., akademik

Nature of carbon - alkali metal bond studied by means of electron
absorption spectra. Dokl. AN SSSR 150 no.5:1051-1054 Je '63.
(MIRA 16:8)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova.
(Chemical bonds) (Carbanions--Absorption spectra)

SPIRIN, Yu.L.; POLYAKOV, D.K.; GANTMAKHER, A.R.; MEDVEDEV, S.S., akademik

Polymerization of styrene, butadiene, and isoprene initiated by
lithium-ethyl in various media. Dokl. AN SSSR 139 no.4:899-902
Ag '61. (MIRA 14:7)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova.
(Styrene) (Butadiene) (Isoprene) (Polymerization)

POLYAKOV, D. K.

"Comparative Tests of Chlorophos in Pure Form with Additives, Also
DDT and Nicochloran against Hypodermosis in Cattle."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

All-Union Institute for Veterinary Science (Moscow)

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S/020/61/139/004/019/025

B103/B206

11.2211 also 2209, 1372

AUTHORS: Spirin, Yu. L., Polyakov, D. K., Gantmakher, A. R., and Medvedev, S. S., Academician

TITLE: Polymerization of styrene, butadiene and isoprene, initiated by lithium ethyl in various media

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 4, 1961, 899-902

TEXT: The authors investigated the separate polymerization and copolymerization of monomers: a) styrene, b) butadiene, and c) isoprene, which was initiated with lithium ethyl and carried out in 1) toluene, 2) triethylamine (amine), 3) diethyl ether, 4) dioxane, and 5) tetrahydrofuran (THF). Thus, the dependence of the reactivity of these monomers on their structure and on polymerization conditions was to be clarified. The methods were described in previous studies (Ref. 1: Yu. L. Spirin et al., Vysokomolek. soyed., 2, 1082 (1960); Ref. 2: L. M. Lanovskaya et al., ibid., 1391). In all three cases, the molecular weight of the polymers increased in 1)-5) with the intensity of polymerization. Its dependence on the concentration C of the components was close to the ratio M/C (Ref.

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Polymerization of styrene, butadiene ...

3. M. Szwarc & al. J. Am. Chem. Soc., 78, 2656 (1956), Ref. 4: F. Welch, *ibid.* 81, 1345 (1959)). The walls of the dilatometer were subjected to special treatment when the investigation took place at a low concentration

of the initiator ($\sim 10^{-5}$ mole/l). In these cases the concentration of the active centers was determined on the basis of the molecular weight. In the presence of 2) to 5), a bulb dilatometer melted from one piece of quartz was used for polymerization, the concentration of active centers being determined spectrophotometrically at a given wavelength. 1): Even at relatively low concentrations of the initiator, deviations from the proportional dependence of the rate on the concentration of the initiator occurred. The rules observed were previously explained (Ref. 1) by the formation of mutually associated "live" polymers in hydrocarbon media. They are inactive during polymerization. The association of the active centers was also proved viscosimetrically: The viscosity of the solutions of the "live" Li polyisoprene in toluene dropped considerably due to deactivation. The equilibrium between the associates and the monomer centers which are active during polymerization, is displaced with the temperature rise in the direction of the latter. Thus, the activation energy of the process is lowered. This takes place even at a

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Polymerization of styrene, butadiene ...

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concentration of the initiator of $\sim 0.5 \cdot 10^{-4}$ mole/l. Thus, an association exists also under these conditions. The authors established that the association of the active centers increases as follows: Li polystyrene < Li polyisoprene < Li polybutadiene. The relative reactivity of the monomers increases as follows: styrene < isoprene < butadiene. 2) - 5); Polymerization is accelerated with the introduction of these solvents, but the activation energies are reduced correspondingly. THF (0.6%) which reduces the activation energy of styrene polymerization in toluene from 14.5 to 6.8, has the strongest effect. However, the activation energy of isoprene polymerization in THF rises with temperature increase. This seems to be explained by a degenerate passing on of the chain through the monomer (Ref. 6; S. Ye. Bresler et al., ZhTF, ser. B, 28, 114 (1958)). The association of the "live" polymers is considerably reduced in the presence of 2) to 5), since 2) to 5) form complexes with lithium. Association of the Li polystyrene is absent in the medium of 2) to 5) (there is a proportional dependence between the rate of polymerization and the concentration of the initiator); Li polyisoprene is slightly associated in amine; Li polybutadiene is considerably associated in

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Polymerization of styrene, butadiene ... B103/B206

amine. Even in THF, which is a solvent of high dissolving capacity, some associations of Li polybutadiene occur. This the authors believe to be a dependence of the degree of association of the active centers on their construction. In previous studies (Ref. 1; Ref. 7; Yu. L. Spirin & al., Vysokomolek. soyed., 1, 1258 (1959)) the authors explained the peculiarities of the polymerization of non-polar monomers of the above type by the participation of the lithium component, besides the carbanion component, in the growth of the chain. The introduction of 2) to 5) which form complexes with the lithium component of the catalyst, reduces the effect of this component on the growth of the chain. The mechanism of the process is changed correspondingly. It approaches a typical anionic polymerization in the presence of admixtures of high dissolving capacity (THF). The authors presume that the reduction of the activation energy with increasing THF concentration takes place due to the destruction of associates as well as through a change of the complexes between THF and the active centers, and through the increase of the dielectric constant of the medium. In spite of different dielectric constants of ether and dioxane (4.33 and 2.28 at 20°C), the polymerization of styrene in it proceeds at a comparable rate and activation energy. The authors also

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Polymerization of styrene, butadiene ... E103/B206

investigated the composition of copolymers in the systems styrene-isoprene and styrene-butadiene in the presence of 2) to 5), and calculated the copolymerization constants for amine and THF. The relative portion of styrene in the copolymer rises in these systems when 2) to 5) are introduced. It may be seen from the data that the effect of the solvents on separate polymerization and copolymerization is not always the same. In the presence of THF, the copolymers are strongly enriched with styrene and correspond to the compositions from typical anionic processes (D. E. Kelley, A. V. Tobolsky, J. Am. Chem. Soc., 81, 1597 (1959)). The relative reactivity of monomers increases in THF, e. g., isoprene < butadiene < styrene. The authors presume that the reactivity of monomers on separate polymerization in polar media is changed in the same sequence as in the case of copolymerization. The effect of solvents 1) to 5) on polymerization largely depends on their electron-donor capacity. Relatively weak electron donors like amine, ether, or dioxane change the polarization of the Li-C bond only slightly. In individual cases, they even increase the activation energy of chain growth as compared with hydrocarbon solvents. The strong electron donors (THF), however, entirely eliminate the effect of lithium. Thus, the polarization

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S/020/61/139/004/019/025

Polymerization of styrene, butadiene ... B103/B206

of the Li-C bond is abruptly increased. The process is here brought nearer to that of typical anionic polymerization, where the carbanion forms the active center. There are 1 figure, 2 tables, and 8 references: 4 Soviet-bloc and 4 non-Soviet-bloc. The most important references to English-language publications see in the body of the abstract.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: April 24, 1961

Card 6/6

PLASMA POLYMERIZATION

22/1/60

International symposium on macromolecular chemistry. Moscow, 1960.
 Mezhdunarodnyy simpozium po makromolekulyarnoy khimii, SSSR, Moskva, 19-18 Iyunya 1960 g.; doklady i referenty. Sektzia II. (International Symposium on Macromolecular Chemistry. Held in Moscow, June 19-18; Papers and Summaries) Section II. [Moscow, Izd-vo AN SSSR, 1960] 559 p. 5,500 copies printed.
 Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry
 Tech. Ed.: P.A. Prusakov.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high-molecular compounds.

CONTENTS: This is Section II of a multivolume work containing papers on macromolecular chemistry. The papers in this volume treat mainly the kinetics of various polymerization reactions initiated by different catalysts or induced by radiation. Among the research techniques discussed are electron paramagnetic resonance spectroscopy and light-scattering interpolation. There are summaries in English, French and Russian. No personal files are mentioned. References follow each article.

Beckmann, R., H.S., and Z.A. Shitina (USSR). Inhibition of Polymerization by Aromatic Compounds 22

Yudin, K., I. Kende, and M. Kori (Hungary). Kinetics of the Inhibition of Polymerization of Styrene by Nitro Compounds 31

Baranyay, G.A., L.M. Strang, Y.N. Likhitsky, and V.S. Eklis (USSR). Radical Decomposition Reactions of Some Peranhydrides and Peroxides 53

Elshamir, A.A., and O.A. Fiofeyev (USSR). On the Relative Activity of Benzofluorene-1-oxides in Polymerization and Co-polymerization Reactions With Other Bionic Compounds 62

Prigor, L.M., and S.Ya. Finkha' (USSR). Interchain Exchange Reactions in the Process of Radical Polymerization 72

Barby, D., E. Kiriya, G. Kiriya, and Y.P. Li (Hungary). Kinetic Study of Radical Polymerization of Vinyl Monomers in the Presence of SiCl₄ 103

Kozlovskiy, K., and B. Gromakova (Poland). A Method of Measuring the Polymerization Rate at a High Degree of Conversion 120

Erishen, J., and M.P. Martynova (USSR). Study of the Mechanism of Emulsion Polymerization 127

Erishen, J., and M. Sholish (Czechoslovakia). The Polymerization Rate for a Single Particle During Emulsion Polymerization 135

Erishen, J., and Ya. Zakhara (Czechoslovakia). Emulsion Polymerization of Chloroacrylonitrile 149

Erishen, J., and G. Winiarski (Poland). Change of Potential During Polymerization in Oxidation-Reduction Systems 157

Radtsig, Z., and A. Kefek (Czechoslovakia). The Test of Reaction As a Means of Studying the Mechanism of the Emulsion Polymerization of Styrene and Chloroacrylonitrile 166

Erishen, J., D.K. Polkov, A.R. Gontcharenko, and S.Ya. Finkha' (USSR). Polymerization in the Presence of Organic Compounds of Alkali Metals 184

Kozlovskiy, K., S.P. Mikhaylovskiy, V.A. Krasnikova (USSR). On the Mechanism and Mechanism of the Polymerization of Methyl Methacrylate by Butyllithium 208

Erishen, J., M. Vojtisek, I. Lachova, and K. Vasek (Czechoslovakia). Chain Degradation During the Anionic Polymerization of Octamethylcyclotetrasiloxane. The Formation of Stable Complexes at Active Centers 232

Radtsig, Z., I. Mojzlik, and K. Pisk (Czechoslovakia). Kinetics of the Polymerization of Formaldehyde 253

Vasely, K. (Czechoslovakia). On the Mechanism of Ionic Polymerization of Alkyl, Z., and A. Kefek (Czechoslovakia). On the Role of Nonpolar Compounds in the Cationic Polymerization of Isobutylene 262

272 45

S/190/60/002/007/012/017
B020/B052

11.2211

AUTHORS: Spirin, Yu. L., Polyakov, D. K., Gantmakher, A. R.,
Medvedev, S. S.

TITLE: Polymerization and Copolymerization of Isoprene Initiated by
Ethyl Lithium

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 7,
pp. 1082-1092

TEXT: In a previous paper it has been shown (Ref. 1) that the polymeri-
zation mechanism of styrene in the presence of ethyl lithium changes con-
siderably with the transition from a hydrocarbon solvent to a triethyl-
amine toluene mixture. Here, the polymerization and copolymerization laws
of isoprene and styrene by ethyl lithium are investigated under various
conditions. Ethyl lithium was synthesized by reaction of metallic lithium
and ethyl chloride in benzene (Ref. 2). After recrystallization it was
solved in toluene, vacuum-filtered and filled into ampoules. From them,
the solution was filled into the device shown in Fig. 1. The polymeri-
zation was carried out in the dilatometer shown in Fig. 2. The polymers

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Polymerization and Copolymerization of Isoprene
Initiated by Ethyl Lithium

S/190/60/002/007/012/017
B020/B052

were precipitated from the obtained solutions by methanol. During the isolation of polyisoprene, the antioxidant $\text{H}_2\text{O}_3\text{OH}-\text{A}$ (Neozone-~~B~~) was added to methanol. The polymers were vacuum-dried, and the viscosity of polystyrene in benzene (Ref. 1), and that of polyisoprene in toluene were determined at 30°. The composition of the copolymers was IR-spectrographically and refractometrically determined from their hydrogen and carbon contents on the basis of the supposition that the intrinsic viscosity is an additive quantity. The difference in the results obtained by various methods, was not more than $\pm 2.5\%$. The dependence of the polymerization rate of isoprene on the concentration of the monomer in toluene, ethyl lithium in toluene, triethylamine and the catalyst in a toluene - triethylamine mixture, is graphically presented in Fig. 3. It is shown that the polymerization rate is proportional to the monomer concentration. In the toluene - amine mixture, the polymerization rate is proportional to the concentration of the catalyst. However, the dependence of the polymerization rate in hydrocarbons in connection with the lithium polyisoprene association, on the concentration of the catalyst, is more complicated. Fig. 4 shows the kinetic curves of the isoprene and styrene polymerization with 0.003 mole/l of ethyl lithium solution in toluene, and in a toluene -

Card 2/4

Polymerization and Copolymerization of Isoprene S/190/60/002/007/012/017
Initiated by Ethyl Lithium B020/B052

amine mixture. The temperature dependence of the polymerization rate of isoprene in toluene and a toluene - amine mixture, is shown in Figs. 5 and 6. Table 1 gives the activation energies and rate constants during the increase of the chains in the isoprene and styrene polymerizations. For comparison, the same quantities are given as to radical polymerization. $E = 14.3$ kcal/mole, $k_{300} = 0.5$ in the polymerization of isoprene in toluene, and in the amine - toluene mixture: $E = 9.2$ kcal/mole, and $k_{300} = 0.03$.

The dependence of $\log [\eta]$ on $\log M$ for polyisoprene in toluene, and toluene with a triethylamine addition, are shown in Fig. 7. Table 2 gives the composition of isoprene styrene copolymers in various solvents at 27°C ; the kinetic curves of the system under different conditions are given in Fig. 8. The constants of the copolymerization of isoprene and styrene in toluene were found to be $r_1 = 9.5$, $r_2 = 0.25$; in a toluene - amine mixture $r_1 = 1$, $r_2 = 0.8$. On the basis of the results obtained, a polymerization mechanism was suggested for vinyl and diene-monomers in the presence of ethyl lithium under various conditions. There are 8 figures, 2 tables, and 11 references: 6 Soviet and 5 US.

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Polymerization and Copolymerization of Isoprene S/190/60/002/007/012/017
Initiated by Ethyl Lithium B020/B052

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physico-chemical Institute imeni L. Ya. Karpov)

SUBMITTED: March 17, 1960

Card 4/4

[illegible]

SPIRIN, Yu.L.; POLYAKOV, D.K.; GANTMAKHER, A.R.; MEDVEDEV, S.S.

Individual and joint polymerization of isoprene, initiated by
ethylolithium. Vysokom.soed. 2 no.7:1082-1092 J1 '60.
(MIRA 13:8)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova.
(Isoprene) (Lithium) (Styrene)

POLYAKOV, D. K., IVASHKOV, I. S., ANDREYEV, K. P., VORONIN, M. V. and PODAROV, D. I.

"Efficiency of chlorophos and other preparations in the case of hypodermatosis in cattle."

Veterinariya, Vol. 37, No. 4, 1960, p. 71

VNIIVS

POLYAKOV, D.K., kand.vet.nauk

Epizootology, clinical picture and diagnosis of demodecosis
in cattle. Trudy VNIIVSE 11:173-193 '57. (MIRA 11:12)
(Scabies)

POLYAKOV, D.K., kand.vetnauk

Seasonal dynamics of demodecosis in cattle and attempts at
treatment. Trudy VNIIVSE 13:107-116 '58. (MIRA 11:12)
(Scabies)

POLYAKOV D. K.

USSR/Diseases in Farm Animals. Diseases Caused by Arachno-Entoms.

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54942.

Author : Polyakov, D. K.

Inst : ~~All-Union~~ Scientific Research Institute of Veterinary Sanitation and Ectoparasitology.

Title : To the Problem of Demodexosis Epizootology, its Clinical Characteristics and Diagnosis in Large Horned Cattle.

Orig Pub: Tr. V es. n.-i. vet. sanitarii i ektoparazitol., 1957, 11, 173-193.

Abstract: When 1,276 preserved large horned cattle skins were examined, demodexosis (Demodex bovis) damage (DD) was found in 77 skins (9.8 percent). In some of the skin lots the percentage of the ones with damages surpassed 50 percent.

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USSR/Diseases in Farm Animals. Diseases Caused by Arachno-
Entoms.

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54942.

most valuable skin layers. This invasion causes great economical damage to the nation's farm industry. After removal of subcutaneous cellular tissue, DD appears more pronounced as round or oval pustules with precisely marked edges. Topographically, these DD spots correspond to tubercles, which are found in the hairy skin layers. The author suggests that the individual DD should be called "colonies", and presents their classification according to size. Clinical diagnosis consists in the following procedure: at palpitation of the skin in the region of the masseters, the neck, the gill and the sides of the thorax, especially of those regions which are concealed by elbow joints, one should feel for the globules, the tubercles rolling

Card : 3/5

14

POL'AKOV, D.K., kand.vet.nauk

~~Measures of controlling demodectic mange of cattle.~~ Leg. prom.
18 no.4:10-11 Ap '58. (MIRA 11:4)
(Cattle--Diseases)

POLYAKOV, D.K., kandidat veterinarnykh nauk.

Demodectic mange in cattle. Veterinariia 33 no.8:74-77 Ag '56.
(MLRA 9:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii i ektoparazitologii.
(Cattle--Diseases and pests) (Scabies)

POLYAKOV, D.K.

1954-1955

**First All-Union Conference on Veterinary Dermatology, Arachnology
and Entomology. Veterinariia 31 no.11:63-64 N '54. (MLBA 7:11)
(VETERINARY MEDICINE--CONGRESSES)**

EPSHTEYN, A.D., inzhener; POLYAKOV, D.G., inzhener, redaktor; POPOVA,
S.M., tekhnicheskii redaktor.

Testing sliding liquid friction bearings for rolling-mill
machinery. Nauchno-tekhnicheskaya informatsiya no.24:3-45
'54. (MLRA 7:11)
(Rolling-mill machinery)

POLYAKOV, D.L.

POLYAKOV, D.L., inzhener, redaktor; BATURIN, V.V., kandidat tekhnicheskikh nauk, redaktor; BORISOV, V.P., inzhener, redaktor; GOVOROV, V.P., inzhener, redaktor; MATS, Ya.M., inzhener, redaktor; RIVKIN, Kh.I., kandidat tekhnicheskikh nauk, redaktor; TURKUS, V.A., dotsent, redaktor; KORSAKOV, S.S., retsenzent; UFIMTSEV, G.N., retsenzent.

[Manual for planning heating and ventilation systems of industrial enterprises] Spravochnik po proektirovaniu otopleniia i ventilatsii promyshlennykh predpriatii. [Redkollegiia D.L. Poliakov i dr. Redaktor V.A. Turkus] Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953-
(MIRA 7:6)

1. Leningrad. Proyektnyy institut ministerstva stroitel'stva.
(Heating--Handbooks, manuals, etc.) (Ventilation--Handbooks, manuals, etc.)

POLYAKOV, D.L.

PENTKOVSKIY, N.I., dotsent, kandidat tekhnicheskikh nauk; RAYKHINSHTYIN, S.I., dotsent, kandidat tekhnicheskikh nauk; BOGUSLAVSKIY, L.D., dotsent, kandidat tekhnicheskikh nauk; PASHCHENKO, N.Ye., inzhener, retsenzent; POLYAKOV, D.L., inzhener, redaktor [deceased]; ZHURAVLEV, B.A., inzhener, nauchnyy redaktor; GOLUBENKOVA, L.A., redaktor izdatel'stva; PERSON, M.N., tekhnicheskiy redaktor

[Organization and planning of construction and assembly work in establishing heat and gas supply and ventilation] Organizatsiya i planirovaniye stritel'no-montazhnykh rabot po teplo-gazosnabzheniyu i ventilatsii. Pod red. D.L.Poliakova. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 293 p. (MLRA 9:11)

1. Chlen-korrespondent Akademii arkhitektury SSSR (for Pashchenko)
(Heat engineering) (Ventilation)

POLYAKOV, D.Ya.

Alcohol-novocaine block in traumas complicated by traumatic shock.
Sov.med. 21 no.8:124-126 Ag '57. (MIRA 10:12)

1. Iz kafedry obshchey khirurgii (zav. - prof. K.N.Kochev) Voronezh-
skogo meditsinskogo instituta.

(SHOCK, therapy,

traum., alcohol-procaine nerve block (Rus))

(PROCAINE, therapeutic use,

traum. shock, alcohol-procaine nerve block (Rus))

(ALCOHOL, ETHYL, ther. use,

same)

(ANESTHESIA, REGIONAL, in var. dis.

alcohol-procaine block in traum. shock (Rus))

CHIFIN, A.K.; POLYAKOV, D.Ya.

Diagnosis of congenital strangulated diaphragmatic hernia in
infants. Sov.med. 21 Supplement:23 '57. (MIRA 11:2)

1. Iz kliniki obshchey khirurgii Voronezhskogo meditsinskogo
institute.

(DIAPHRAGM--HERNIA)

USSR / Zoopar^vitology. Acarina and Insect-Vectors of
Disease Pathogens.

G-3

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33980

Author : Polyakov, E. M.

Inst : ~~Not given~~

Title : Deystvie fitontsidov na iksodovykh kleshchey. -- Effect of
Phytocides on Ixodic Ticks.

Orig Pub : Sb. nauchno-issled. rabot. stud. Stavropolsk. s-kh. in-t,
1956, No. 4, 143-145.

Abstract : Radish juice exerts an acaricidal action in 1 : 3 aqueous
solutions for a period of 24 hours after squeezing. It
is recommended for use for tick control on weakened farm
animals.

Card 1/1

AVILOV-KARNAUKHOV, B.N.; BOGUSH, A.G.; GIKIS, A.F.; DROZDOV, A.D.;
MALOV, D.I.; SINEL'NIKOV, Ye.M.; BRUSENTOV, L.V.; DENISOV, A.A.;
PAL'SHAU, M.V.; POLYAKOV, F.I.; CHERNYAVSKIY, F.I.; BURCK, V.S.;
GORDEYEV, V.I.; KAZHDAN, A.E.; KOVALEV, V.Ye.; KURENNYY, E.G.;
POTAPENKO, V.Ya.

Professor Georgii Mikhailovich Kaialov, 1905- ; on his 60th
birthday and the 37th anniversary of his theoretical and educa-
tional work. Izv. vys. ucheb. zav.; elektromekh. 8 no.10:1181-
1182 '65. (MIRA 18:11)

PAKHOMOV, Yuriy Nikolayevich; GORELIK, L.E., doktor ekonom.nauk,
otv.red.; POLYAKOV, F.M., red.; OKOPNAYA, Ye.D., tekhred.

[Economic law of the planned proportional development of the
national economy; materials for the course "Political economy."
Ekonomicheskii zakon planovernogo, proporsional'nogo razvitiia
narodnogo khoziaistva; materialy po kursu "Politicheskaya ekonomiya."
Kiev, Izd-vo Kievskogo univ., 1959. 35 p. (MIRA 12:11)
(Economics)]

POLYAKOV, G.

Famous innovator. Znan.sila 35 no.4:3-4 Ap '60.

(MIRA 13:8)

(Leonov, Ivan Davydovich)

POLYAKOV, G.

Training shops for electricians. Prof.-tekh. obr. 14 no.1:
5-7 Ja '57. (MLRA 10:2)

1. Direktor tekhnicheskogo uchilishcha no.8, Moskva.
(Electric engineering--Study and teaching)

POLYAKOV, G.

Romanticists. Voen. znan. 41 no.1:44-45 Ja '65.

(MIRA 18:2)

1. Sekretar' Sevastopol'skogo gorodskogo komiteta Leninskogo
kommunisticheskogo soyuza molodezhi Ukrainy.

POLYAKOV, G.

New vanguard of electricians. Prof.-tekh.obr.12 no.9:20-22S'55.
(MIRA 8:11)

1. Direktor tekhnicheskogo uchilishcha no.8, Moscow
(Moscow--Electric engineering--Study and teaching)

POLYAKOV, G.

Laboratory work in electrical engineering. Prof.-tekh.obr. 11
no.6:19-22 S '54. (MLRA 7:10)

1. Direktor remeslennogo uchilishcha No. 28 energetikov (Moskva)
(Electric engineering--Study and teaching)

POLYAKOV, G.

Inspecting automobiles. Za bezop.dvizh. 4 no.5:3 My '62.

(MIRA 15:7)

(Automobiles--Inspection)

GIMATUDINOV, Shamil' Kashafovich, dots.; KUSAKOV, M.M., prof.,
retsenzent; Prinizali uchastiye: GUZEV, A., dots.,
retsenzent; POLYAKOV, G., kand. tekhn. nauk, retsenzent;
MURAV'YEV, I.M., red.; SAVINA, Z.A., ved. red.; VORONOVA,
V.V., tekhn. red.

[Physics of oil-bearing beds] Fizika neftyanogo plasta. Pod
red. I.M.Murav'eva. Moskva, Gostoptekhizdat, 1963. 274 p.
(MIRA 16:12)

1. Moskovskiy institut neftekhimicheskoy i gazovoy pro-
myshlennosti im. akad. Gubkina (for Gimatudinov).
(Petroleum geology)

1. POLYAKOV, G.
2. USSR (600)
4. Latvia - Telecommunication
7. Application of the experience of Latvian communication workers. Sov. sviaz.
3, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

POLYAKOV, G. A.

"Structural Connections Between Neurons" -- "A Glance at the Future of Cybernetics From the Point of View of a Neurologist"

presented at the All-Union Conference on Computational Mathematics and Computational Techniques, Moscow, 16-28 November 1961

So: Problemy kibernetiki, Issue 5, 1961, pp 289-294

POLYAKOV, G.A.

Present status of explanatory well testing and ways of improving
it. Neft. khoz. 39 no.12:30-32 D '61. (MIRA 14:12)
(Oil wells—Testing)

L 46831-66 EWT(1)/EWT(m)/EWP(t)/ETI/T IJP(c) JD/AT
ACC NF: AP6015464 (N)

SOURCE CODE: UR/0181/66/008/005/1461/1466

AUTHOR: Gerasimenko, N. N.; Loburets, Yu. V.; Polyakov, G. F.; Smirnov, L. S. 58

ORG: Institute of Semiconductor Physics, SO AN SSSR, Novosibirsk (Institut fiziki 53
poluprovodnikov SO AN SSSR) 12

TITLE: Investigation of the recombination emission of cadmium sulfide subjected to electron
excitation 27 27

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1461-1466

TOPIC TAGS: recombination emission, cadmium sulfide, electron excitation, semiconductor crystal, emission spectrum

ABSTRACT: The purpose of the present work is the investigation of the spectrum and the kinetics of recombination emission (RE) of unalloyed CdS single crystals subjected to excitation by a pulsed beam of high-energy (200-400kev) fast electrons. It is found that the green band is present on irradiated and nonirradiated specimens, moreover, after irradiation the peak of the green band shifts toward the short wavelengths and the half-width of the band decreases. No substantial variations were observed in the intensity, the half-width, or the peak position of the red band of the RE spectrum after irradiation. These results preclude considering some

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ACC NR: AP6015464

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type of radiation defects for the red band; the reverse, however, is more probable, i.e., it may be assumed that the recombination centers related to the red band of the RE spectrum are introduced into the crystal prior to irradiation in the process of crystal growth. This assumption is strengthened by verification by x-ray excitation, when the red band in the RE spectrum was present in irradiated, nonirradiated, alloyed, and nonalloyed crystals. The data obtained indicate that the combined investigation of the kinetics and RE spectra of semiconductors during excitation by an electron beam may provide useful information on emission centers, in particular radiation defects, their nature, rate of formation, annealing, etc. In conclusion, the authors consider it their pleasant duty to thank S. A. Sokolov, V. M. Zelevinskiy, and G. A. Murav'yev for assistance in the work, and I. V. Yegorov and L. B. Kreynin for providing the crystals. Orig. art. has: 6 figures.

SUE CODE: 20/ SUBM DATE: 08Oct65/ ORIG REF: 002/ OTH REF: 005

Card 2/2

blg

VEREMEYENKO, V.D.; POLYAKOV, G.A.; OVNATANOV, G.T.

Air drilling. Neftianik 6 no.4:7-9 Ap '61. (MIRA 14:8)

1. Glavnyy geolog Minusinskoy kontory bureniya (for Veremeyenko).
2. Nachal'nik partii po ispytaniyu skvazhin Minusinskoy kontory bureniya (for Polyakov).
3. Nachal'nik sektora ispytaniya razvedochnykh i opornykh skvazhin Vsesoyuznogo nauchno-issledovatel'skogo geologorazvedochnogo neftyanogo instituta (for Ovnatanov).

(Oil well drilling)

POLYAKOV, G.D.

Calculating the elements of drilling rigs using derrick without
lifting pipes. Trudy TSKB no. 5:67-73 '62. (MIRA 18:7)

POLYAKOV, G.D.

Adaptive significance of the variability of characters and properties of fish populations. Trudy sov. Ikht. kom. no.13:158-172 '61. (MIRA 14:8)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh AN SSSR.

(Fish populations)

POLYAKOV, G. D.

Specification of methods for measuring specific fuel consumption
by engines. Avt. prom. 28 no.6:9-11 Je '62. (MIRA 16:4)

(Gas and oil engines—Fuel systems)

POLYAKOV, G.D.

Adaptive changes in the size and weight structure of fish populations
of the same age class in relation to feeding conditions. Vop. ikht.
no.16:11-33 '60. (MIRA 14:14)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh imeni
A.N.Severtsova Akademii nauk SSSR.
(Fish populations) (Fishes--Food)

DOROKHOV, S.M.; PAKHOMOV, S.P.; POLYAKOV, G.D.; DOBYCHINA, I.N.,
red.; GUREVICH, M.M., tekhn. red.

[Pond fish culture] Prudovoe rybovodstvo. Pod red. G.D.Poliakova.
Izd.2., ispr. i dop. Moskva, Sel'khozizdat, 1962. 263 p.
(MIRA 16:4)

(Fish culture)

POLYAKOV, G.D.

Adaptive interrelationship between changing fish populations and
food conditions. Trudy Inst. morf. zhiv. no.42:5-63 '62.
(MIRA 17:10)

GORBANEVSKIY, V.Ye.; POLYAKOV, G.D.

Designing the flywheel of a stand for testing diesel engine
fuel systems. Avt. prom. 31 no.1:11-13 Ja '64.

(MIRA 18:3)

GAYEVSKAYA, N.S.; POLYAKOV, G.D.; SMIRNOV, N.N.; TSIKHON-LUKANINA, Ye.A.

Manometric method for determining the gas exchange intensity in aquatic animals. Zool. zhur. 44 no.2:169-177 '65. (MIRA 18:5)

1. Kaliningradskiy institut rybnoy promyshlennosti i khozyaystva, Institut morfologii zhivotnykh AN SSSR, Moskva i Institut biologii vnutrennikh vod AN SSSR, Bork Nekuzskogo rayona Yaroslavskoy oblasti.

S/273/63/000/002/005/010
A052/A126

AUTHOR: Polyakov, G.D.

TITLE: Improved method of measuring the specific fuel consumption by an engine

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, 39. Dvigateli vnutrennego sgoraniya, no. 2, 1963, 19, abstract 2.39.137 (Avtomob. prom-st', no. 6, 1962, 9 - 11)

TEXT: The errors are analyzed coming up when measuring the fuel consumption by weighing on the stand, which result from the preheating of fuel in the injection pump. Schemes with and without a fuel by-pass are considered. It is pointed out that the summary error may reach 3% and more, and recommendation on its reduction are given.

[Abstracter's note: Complete translation]

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(Fish culture)

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KOLOSOV, Sergey Petrovich; STROMILOV, Vasilii Mikhaylovich; POLYAKOV,
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